

Some new species of spiders of the family Argiopidae
from India

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INTRODUCTION

THE spiders of the genera *Araneus* Clerck and *Chorizopes* Cambridge of the family Argiopidae are very little known from our country. *The Fauna of British India, Arachnida*, by Pocock (1900) describes seven species of the genus *Araneus*. But the genus *Chorizopes* is practically unknown from our fauna. Recently Tikader (1965) and Sadana (1974) have described three species of the genus *Chorizopes* from India.

While examining the spider collection from Maharashtra and Darjeeling, West Bengal, I came across three new species of spiders of the genera *Araneus* and *Chorizopes*, which I describe in this paper.

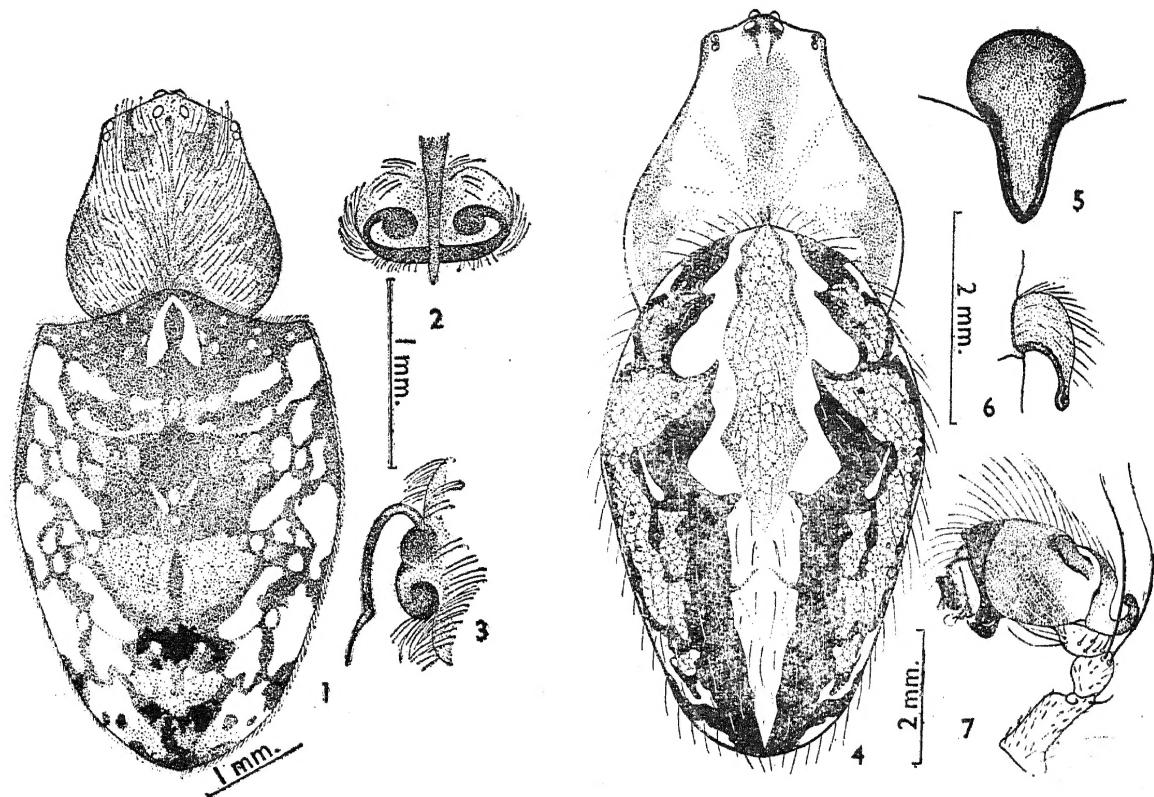
The type specimens will in due course be deposited in the collection of the Zoological Survey of India, Calcutta.

1. *Araneus himalayaensis* sp. nov.

General: Cephalothorax and legs light to deep brown, abdomen brownish-white. Total length 6.20 mm. Carapace 2.20 mm long, 2.00 mm wide; abdomen 4.50 mm long, 3.00 mm wide.

Cephalothorax: Slightly longer than wide, narrowing in front, clothed with fine grey and black pubescence, lateral sides and centre of thorax provided with longitudinal deep brown conspicuous bands. Eyes black, four median eyes situated on the elevated middle portion of carapace and anterior medians slightly larger than the posterior medians. Ocular quad longer than wide and slightly wider in front, lateral eyes small and contiguous. Legs long and strong, clothed with hairs and spines and provided with brown transverse bands. Sternum heart-shaped, pointed behind, deep brown and clothed with grey pubescence.

Abdomen: Longer than wide nearly triangular, broader in front than behind, slightly overlapping in front on cephalothorax. Anterior side of abdomen provided with moderately sharp shoulder points in front. Dorsal



Figures 1-3. *Araneus himalayaensis* sp. nov.
 Fig. 1. Dorsal view of female, legs omitted.
 Fig. 2. Epigyne, front view. Fig. 3. Epigyne, lateral view.

Figures 4-7. *Araneus sinhagadensis* sp. nov.
 Fig. 4. Dorsal view of female, legs omitted.
 Fig. 5. Epigyne, front view. Fig. 6. Epigyne, lateral view. Fig. 7. Male palp.

side of abdomen decorated with chalk-white and deep brown patches (figure 1). Ventral side also decorated with chalk-white and deep brown patches. Mid-ventrally provided with longitudinal deep brown band extending from epigastric fold to near the base of spinnerets. Spinnerets situated ventrally near the middle of the abdomen. Epigyne as in figures 2 and 3.

Holotype one female, *paratype* fifteen females in spirit.

Type locality: Graveyard (N.D.G. College), Darjeeling, West Bengal, India. Coll. Bijan Biswas, 14 April 1974.

This species resembles *Araneus dehaanii* (Doleschall) but is separated as follows: (i) Anterior lateral border of carapace not provided with spine-like tubercle but in *A. dehaanii* anterior lateral border of carapace provided with spine-like tubercle on each side. (ii) The abdominal pattern of decoration also different. (iii) Epigyne also structurally different.

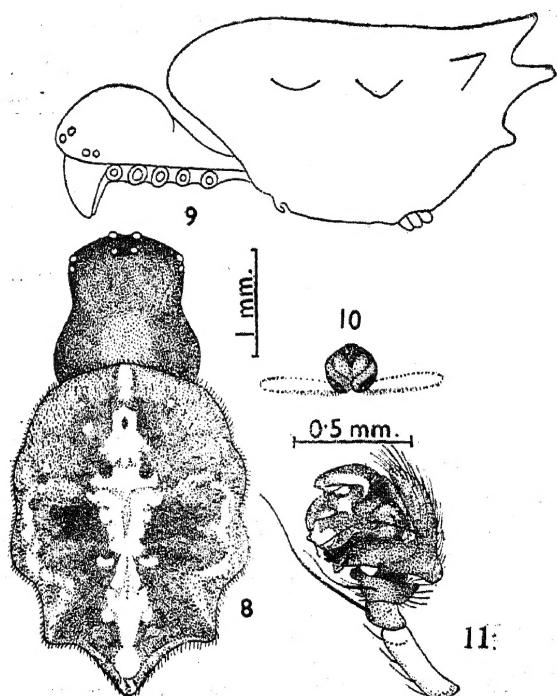
2. *Araneus sinhagadensis* sp. nov.

General: Cephalothorax and legs yellowish-green, abdomen brownish-white. Total length 11.00 mm. Carapace 4.50 mm long, 4.00 mm wide; abdomen 7.80 mm long, 4.50 mm wide.

Cephalothorax: Longer than wide, narrowing in front, clothed with fine pubescence. Lateral sides and middle of cephalothorax provided with longitudinal patches of deep brown colour. Eyes black, four median eyes situated on the elevated middle portion of carapace and posterior medians slightly larger or nearly of the same size as the anterior medians. Ocular quad longer than wide and slightly wider in front than behind. Lateral eyes small and contiguous. Legs long and strong, clothed with hairs and spines. Legs formula 1423. Sternum heart-shaped, pointed behind, deep brown and clothed with fine pubescence. Male slightly smaller than female but the colour same. Male palp as in figure 7.

Abdomen: Longer than wide, narrowing behind clothed with fine hairs and overlapping in front on the cephalothorax. Dorsal side of abdomen decorated with chalk-white, black and yellowish-brown patches. Mid-dorsally provided with conspicuous longitudinal chalk-white patches, extending from base to end of abdomen and provided with a conspicuous black margin (figure 4). Ventral side also decorated with chalk-white and deep brown patches. A deep brown broad longitudinal middle line extending from epigastric fold to near the base of spinnerets and sides encircled by conspicuous chalk-white patches. Epigyne as in figures 5 and 6.

Holotype one female, *paratype* twenty-one females, *allotype* fifteen males in spirit.



Figures 8-11. *Chorizopes bengalensis* sp. nov. Fig. 8. Dorsal view of female, legs omitted. Fig. 9. Lateral view of female, legs omitted. Fig. 10. Epigyne. Fig. 11. Male palp.

Type locality: Sinhagad Fort, Poona, Maharashtra, India. Coll. B. K. Tikader, 18 September 1974.

This species resembles *Araneus theisi* (Walckenaer) but is separated as follows: (i) Abdomen mid-dorsally provided with a longitudinal chalk-white band and margin provided with conspicuous black patches but in *A. theisi* abdomen mid-dorsally provided with a chalk-white band but without black patches on margin. (ii) Epigyne and male palp also structurally different.

3. *Chorizopes bengalensis* sp. nov.

General: Cephalothorax deep-brownish, legs brownish-green and abdomen brown. Total length 4.40 mm. Carapace 1.50 mm long, 1.20 mm wide; abdomen 3.20 mm long, 2.20 mm wide.

Cephalothorax: Longer than wide, clothed with fine black and grey pubescence, wide and high in front, convex and descending steeply behind the cephalic region. Eyes pearly white, lateral eyes nearly contiguous, small and far away from the middle eyes. Ocular quad slightly wider in front than behind. Legs strong, clothed with hairs, provided with transverse brown bands. Sternum triangular, pointed behind, deep brown and clothed with fine hairs. Male nearly of the same colour as female but slightly smaller than female. Male palp as in figure 11.

Abdomen: Longer than wide, clothed with fine pubescence. Dorsolaterally three obtuse or blunt tubercles arranged in a linear order. Posterior end provided with three tubercles arranged vertically (figure 9). Dorsal surface ornamented with admixture of chalk-white and brown as in figure 8. Ventral side brown. Spinnerets situated ventrally far away from posterior end of the abdomen. Epigyne as in figure 10.

Holotype one female, *paratype* sixteen females, *allotype* six males in spirit.

Type locality: Rai Villa, Darjeeling, West Bengal, India. Coll. Bijan Biswas, 17 April 1974.

This species resembles *Chorizopes khanjanes* Tikader but is separated as follows: (i) Ocular quad slightly wider in front than behind but in *C. khanjanes* ocular quad slightly narrow in front than behind. (ii) Dorsal surface of abdomen ornamented with chalk-white patches but in *C. khanjanes* dorsal surface of abdomen ornamented with white, yellow and light brown to dark brown patches. (ii) Epigyne also structurally different.

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